

RAF Northolt ACP

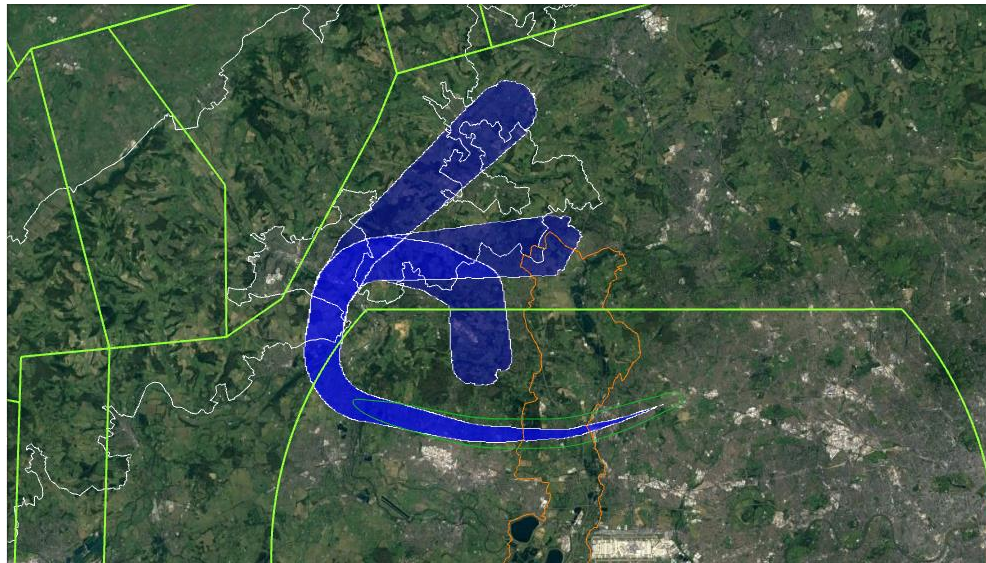
Technical Appendix to support IOA

Oct 2022

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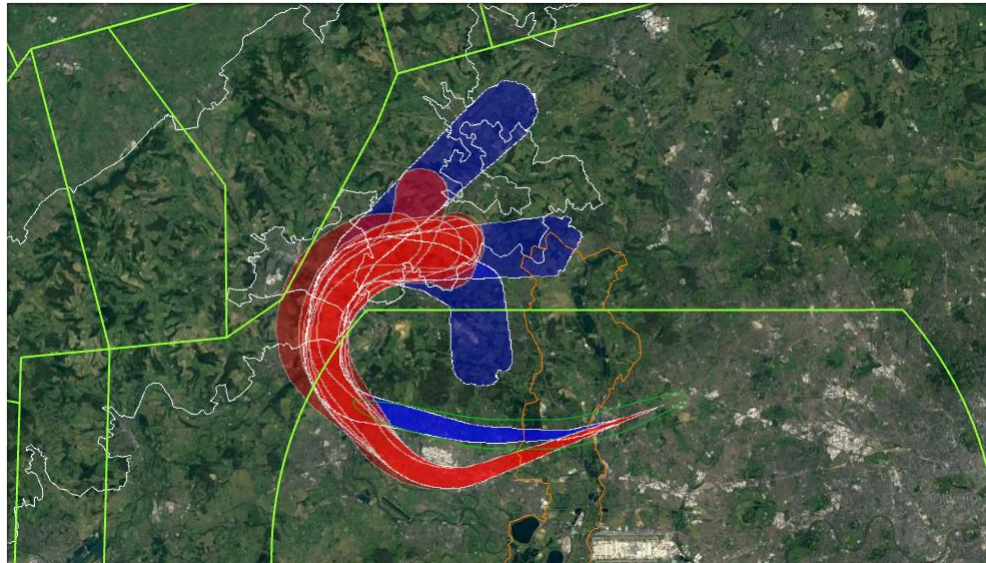
BASELINE RWY07 ARRVS



RWY 07 ARRVS	Total Population	SEL_70
Baseline (Average)	67806	54466
NORTH	78969	54391
EAST	63103	54391
SOUTH	61346	54616



RWY07 ARRVS Option 1 GRP1A



GROUP 1A	Total Population	SEL_70
Baseline Average	67806	54466
Baseline Highest	78969	54616
Baseline Lowest	61346	54391
Track	98120	112755
Track	103896	112745
Track	98220	112755
Track	101773	112753
Track	97380	112612
Track	127923	112585
Track	100417	107989
Track Average	103961	112028
Track Highest	127923	112755
Track Lowest	97380	112585



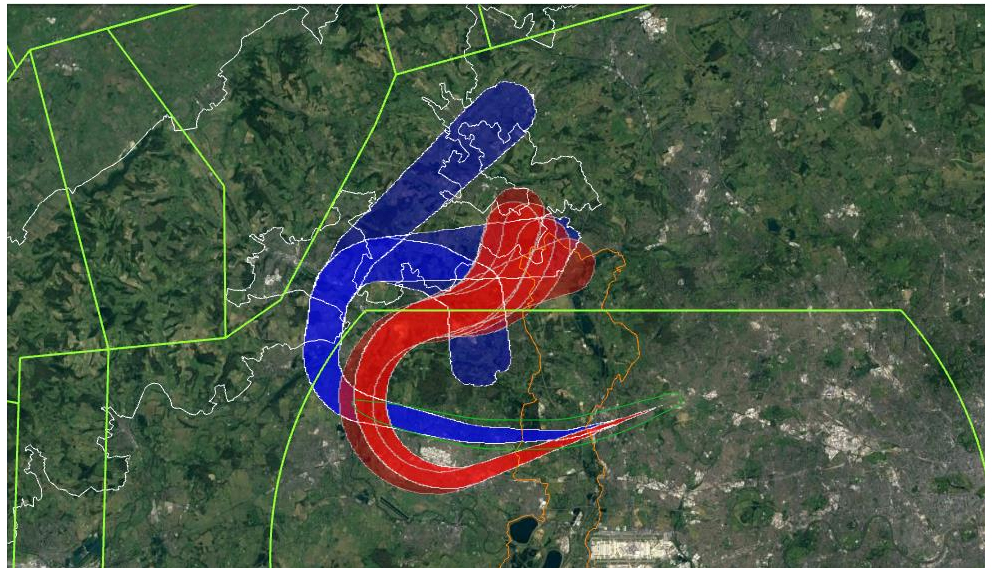
RWY07 ARRVS Option 1 GRP1B



GROUP 1B	Total Population	SEL_70
Baseline Average	67806	54466
Baseline Highest	78969	54616
Baseline Lowest	61346	54391
Track	99071	112804
Track	95002	112804
Track	94658	112834
Track	89420	112804
Track	81074	99716
Track	104091	112834
Track	83230	99716
Track Average	92364	109073
Track Highest	104091	112834
Track Lowest	81074	99716



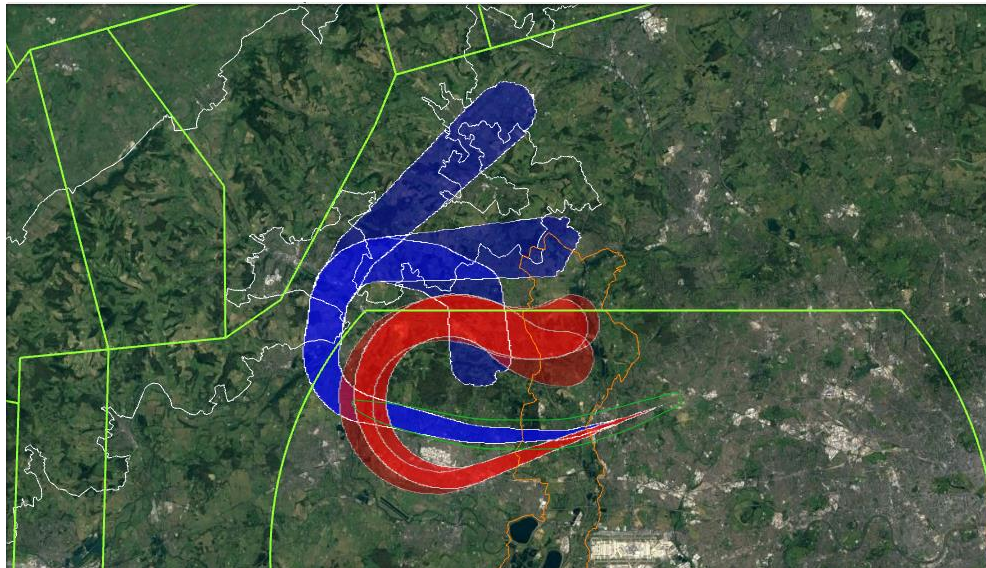
RWY07 ARRVS Option 1 GRP1C



GROUP 1C	Total Population	SEL_70
Baseline Average	67806	54466
Baseline Highest	78969	54616
Baseline Lowest	61346	54391
Track	96749	112834
Track	92938	112834
Track	84304	99716
Track	95837	112863
Track	99636	112834
Track Average	93893	110216
Track Highest	99636	112863
Track Lowest	84304	99716



RWY07 ARRVS Option 1 GRP1D



GROUP 1D	Total Population	SEL_70
Baseline Average	67806	54466
Baseline Highest	78969	54616
Baseline Lowest	61346	54391
Track	94149	112863
Track	96403	112968
Track	85940	99716
Track Average	92164	108515
Track Highest	96403	112968
Track Lowest	85940	99716



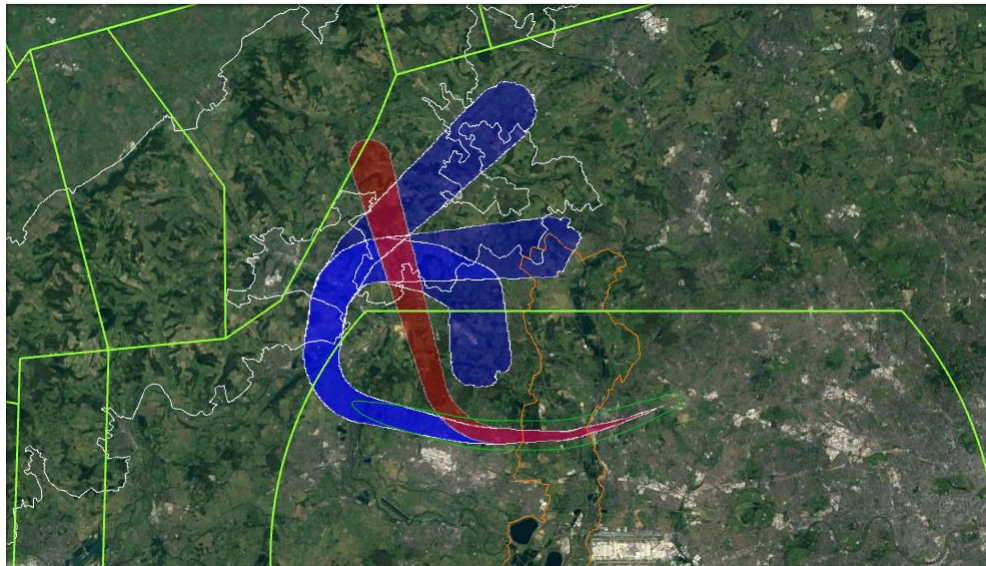
RWY07 ARRVS Option 1 GRP1E



GROUP 1E	Total Population	SEL_70
Baseline Average	67806	54466
Baseline Highest	78969	54616
Baseline Lowest	61346	54391
Track	68134	60926
Track	62711	60983
Track	59696	54391
Track	80906	79716
Track	88723	86735
Track	85315	86355
Track	91569	92390
Track	74382	67618
Track	60934	53684
Track Average	74707	71422
Track Highest	91569	92390
Track Lowest	59696	53684



RWY07 ARRVS Option 1 GRP1F



GROUP 1F	Total Population	SEL_70
Baseline Average	67806	54466
Baseline Highest	78969	54616
Baseline Lowest	61346	54391
Track Average	23357	42276
Track Highest	23357	42276
Track Lowest	23357	42276



RWY07 ARRVS Option 1 ALL



RWY 07 ARRVS ALL	Total Population	SEL_70
Baseline Average	67806	54466
Baseline Highest	78969	54616
Baseline Lowest	61346	54391
Track Average	87999	97169
Track Highest	127923	112968
Track Lowest	23357	42276



BASELINE RWY25 ARRVS



RWY 25 ARRVS	Total Population	SEL_70
Baseline (Average)	316426	188979
NORTH	255478	187842
EAST	300755	188921
SOUTH	393045	190174



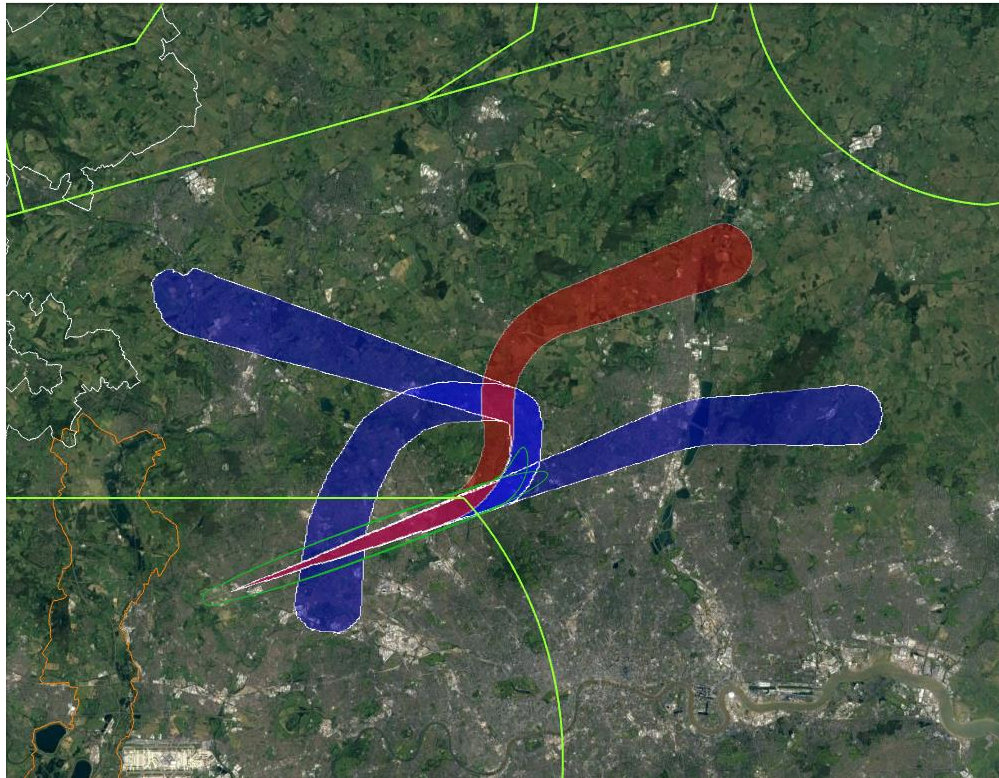
RWY25 ARRVS Option 1 GRP1A



GROUP 1A	Total Population	SEL_70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track	163199	185861
Track	128440	166520
Track	127906	166520
Track Average	139848	172967
Track Highest	163199	185861
Track Lowest	127906	166520



RWY25 ARRVS Option 1 GRP1B



GROUP 1B	Total Population	SEL 70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track Average	168834	166499
Track Highest	168834	166499
Track Lowest	168834	166499



RWY25 ARRVS Option 1 GRP1C



GROUP 1C	Total Population	SEL 70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track	153219	166975
Track	128246	166481
Track	137821	167460
Track Average	139762	166972
Track Highest	153219	167460
Track Lowest	128246	166481



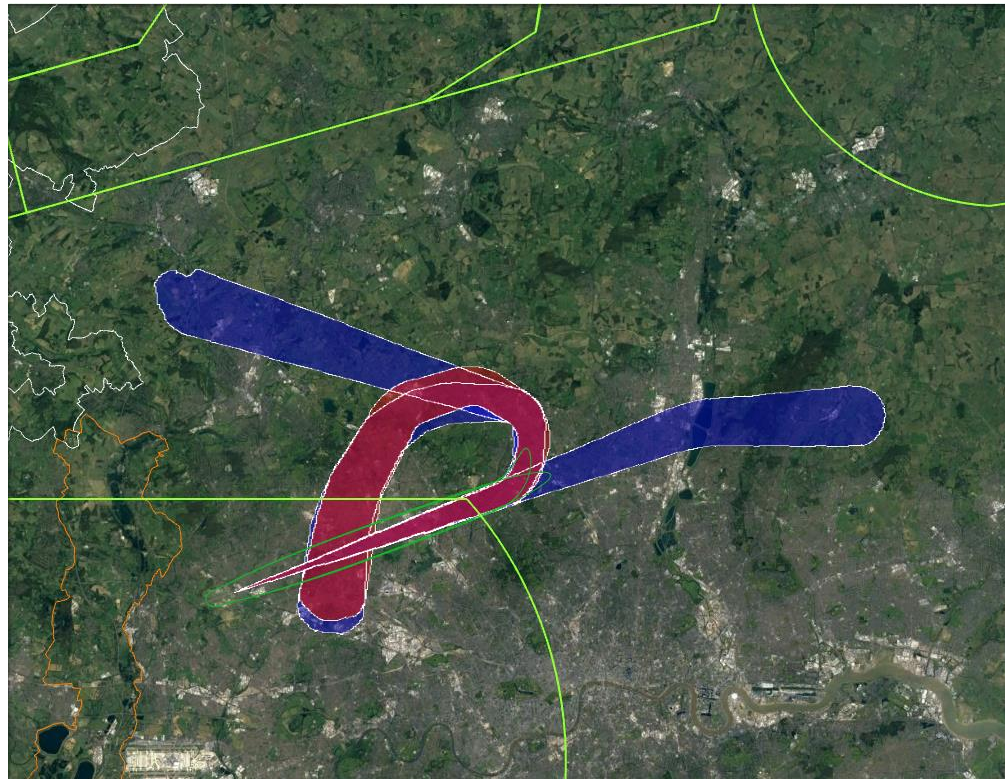
RWY25 ARRVS Option 1



Option 1	Total Population	SEL 70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track Average	143952	169473
Track Highest	168834	189303
Track Lowest	127906	166499



RWY25 ARRVS Option 2 GRP2A



GROUP 2A	Total Population	SEL 70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track Average	377788	189303
Track Highest	377788	189303
Track Lowest	377788	189303



RWY25 ARRVS Option 2 GRP2B



GROUP 2B	Total Population	SEL 70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track	180544	166520
Track	192946	185831
Track	187785	186683
Track	176696	166520
Track	145330	166520
Track	202927	185665
Track	177418	185878
Track	153448	166520
Track	164046	166520
Track Average	175682	175184
Track Highest	202927	186683
Track Lowest	145330	166520



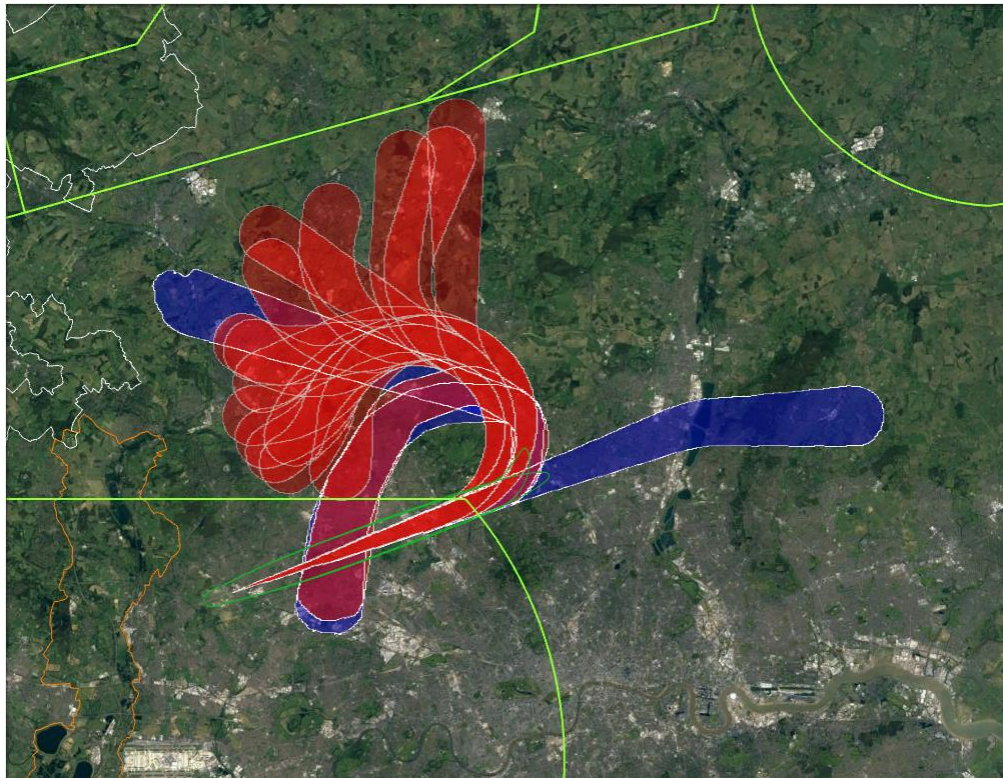
RWY25 ARRVS Option 2 GRP2C



GROUP 2C	Total Population	SEL_70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track	139160	166520
Track	175428	166520
Track	173435	166520
Track	123946	166520
Track	137974	166520
Track	158990	166520
Track Average	151489	166520
Track Highest	175428	166520
Track Lowest	123946	166520



RWY25 ARRVS Option 2



Option 2	Total Population	SEL_70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track Average	179241	172818
Track Highest	377788	189303
Track Lowest	123946	166520



RWY25 ARRVS Option 4 GRP4A



GROUP 4A	Total Population	SEL_70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track Average	300755	188921
Track Highest	300755	188921
Track Lowest	300755	188921



RWY25 ARRVS ALL



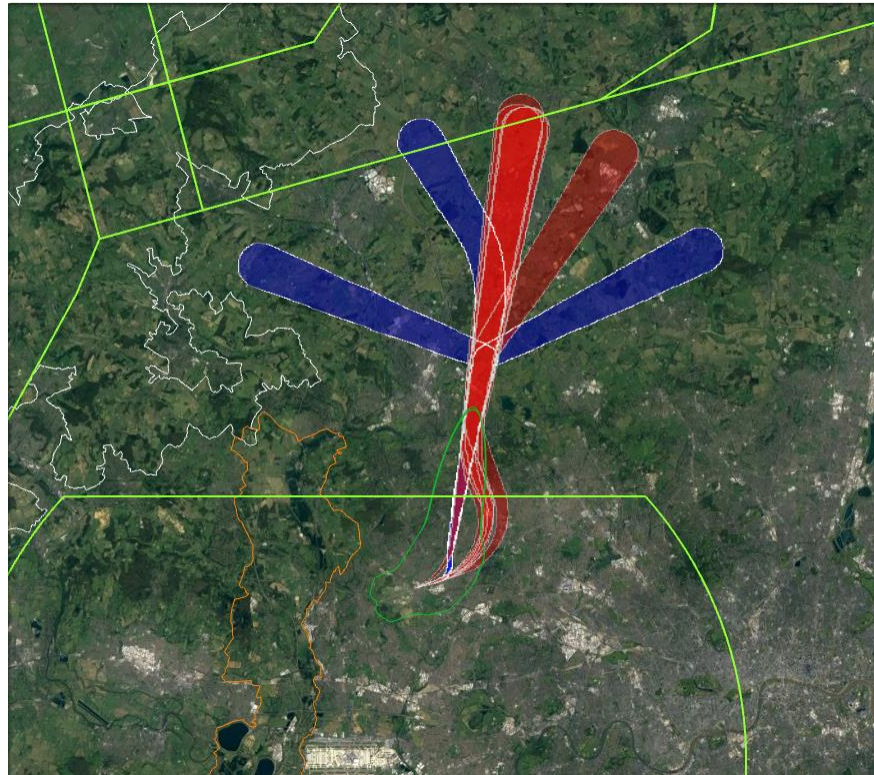
RWY 25 ARRVS ALL	Total Population	SEL_70
Baseline Average	316426	188979
Baseline Highest	393045	190174
Baseline Lowest	255478	187842
Track Average	174012	172513
Track Highest	377788	189303
Track Lowest	123946	166499

BASELINE RWY07 DEPS



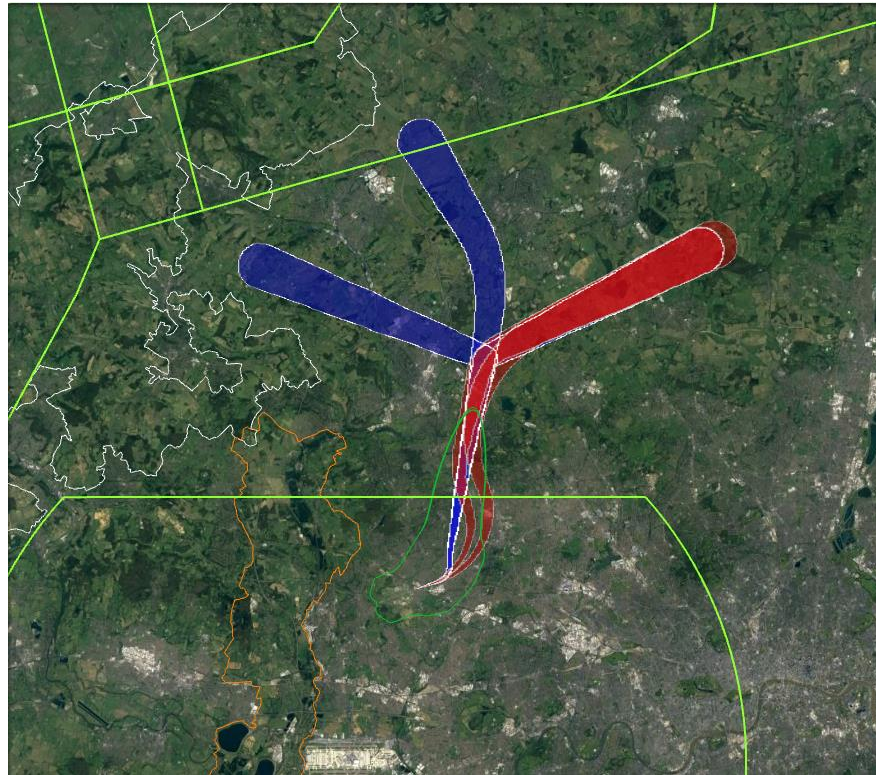
RWY 07 DEPS	Total Population	SEL_70
Baseline (Average)	48691	157118
NORTH EAST	38646	156891
NORTH	42239	156831
NORTH WEST	65188	157633

RWY07 DEPS Option 1 GRP1A



GROUP 1A	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track	83823	183014
Track	66717	188094
Track	83823	200757
Track	70645	200757
Track	97302	200757
Track	70645	158012
Track	87200	189042
Track Average	80022	188633
Track Highest	97302	200757
Track Lowest	66717	158012

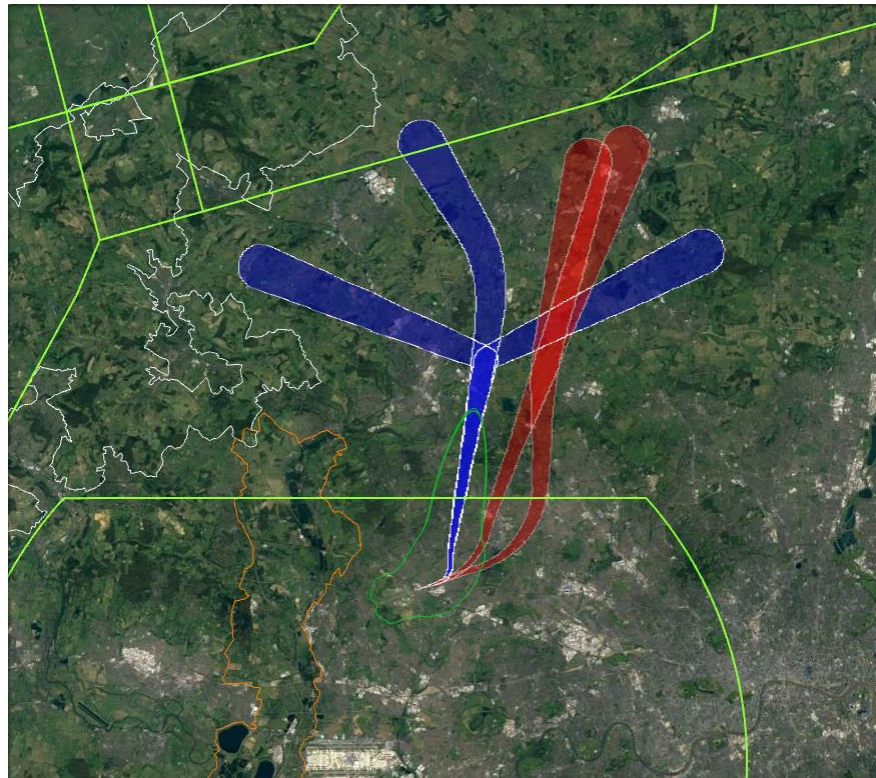
RWY07 DEPS Option 1 GRP1B



GROUP 1B	Total Population	SEL 70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track	53153	189218
Track	40946	168553
Track Average	47049	178886
Track Highest	53153	189218
Track Lowest	40946	168553

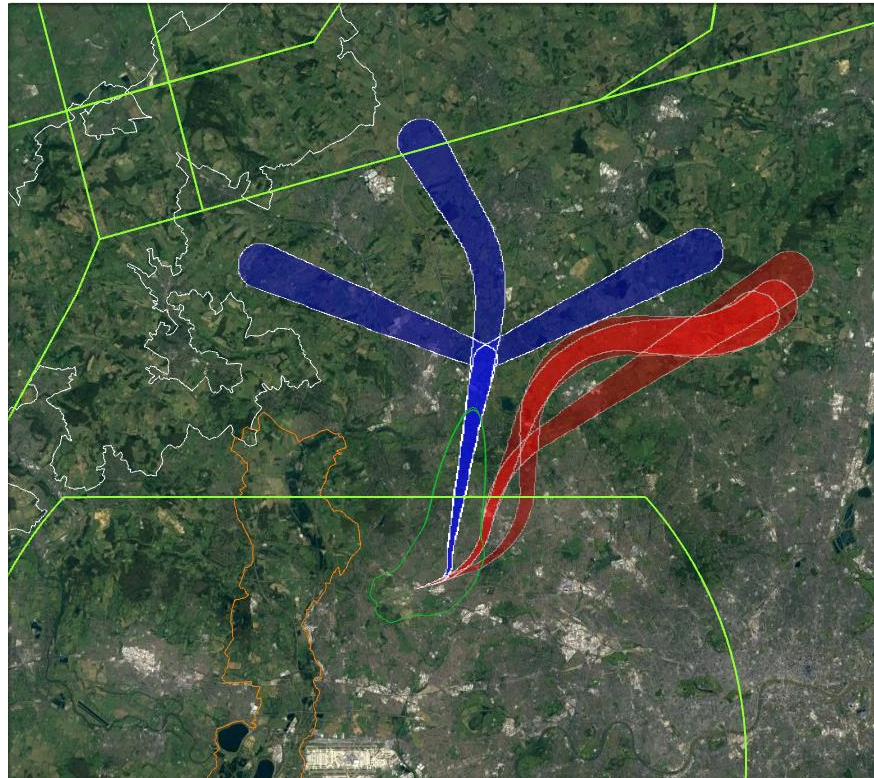


RWY07 DEPS Option 1 GRP1C



GROUP 1C	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track	59604	210448
Track	77744	199183
Track Average	68674	204816
Track Highest	77744	210448
Track Lowest	59604	199183

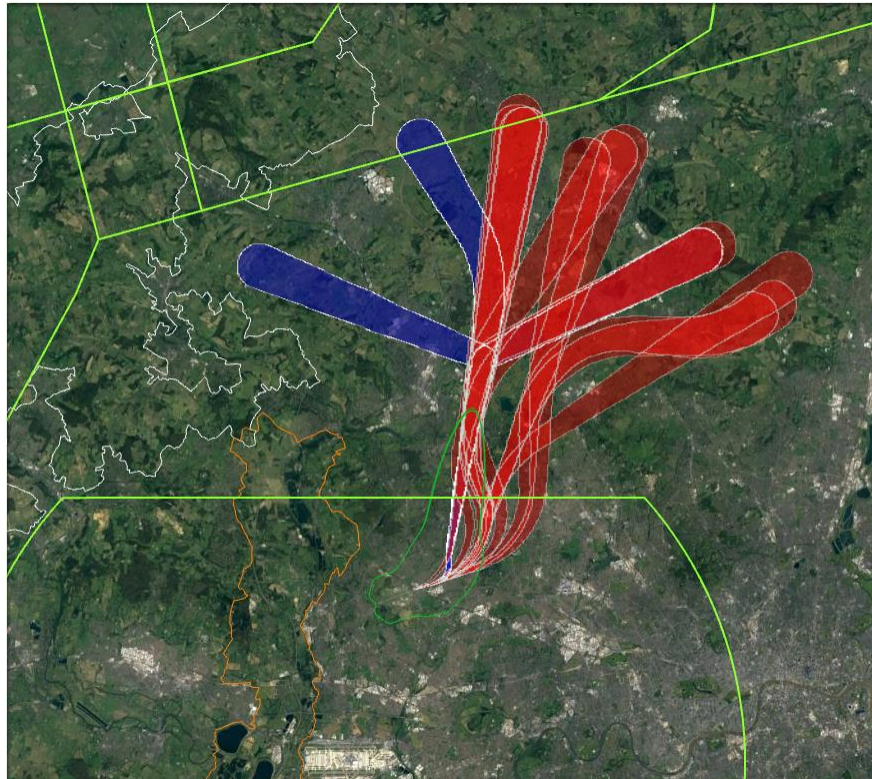
RWY07 DEPS Option 1 GRP1D



GROUP 1D	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track	60364	211471
Track	57825	199183
Track	63140	199848
Track Average	60443	203501
Track Highest	63140	211471
Track Lowest	57825	199183



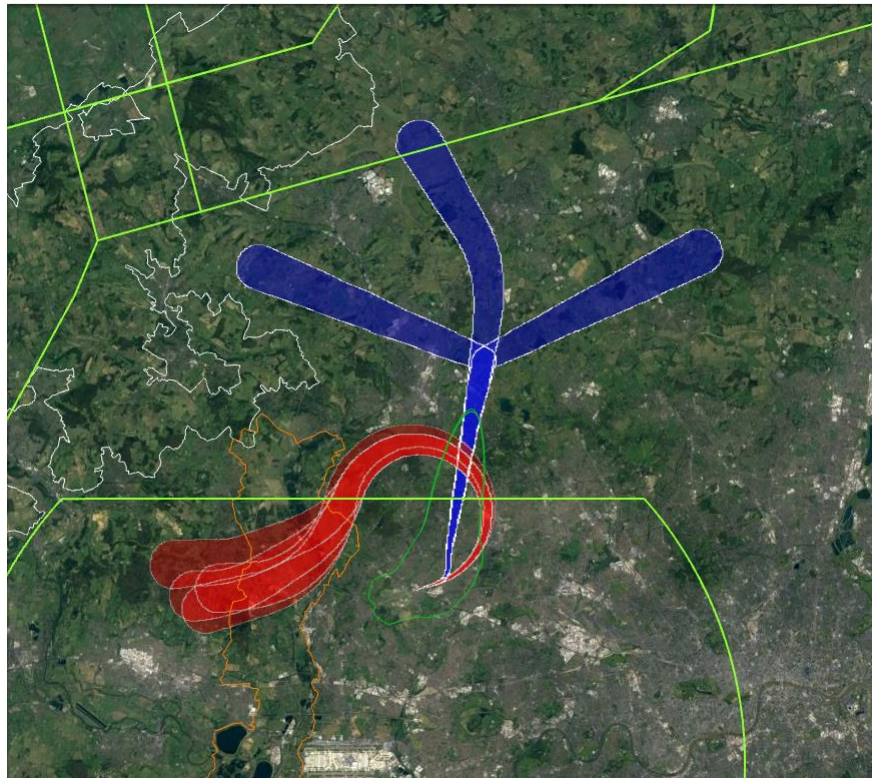
RWY07 DEPS Option 1



Option 1	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track Average	69495	192739
Track Highest	97302	211471
Track Lowest	40946	158012



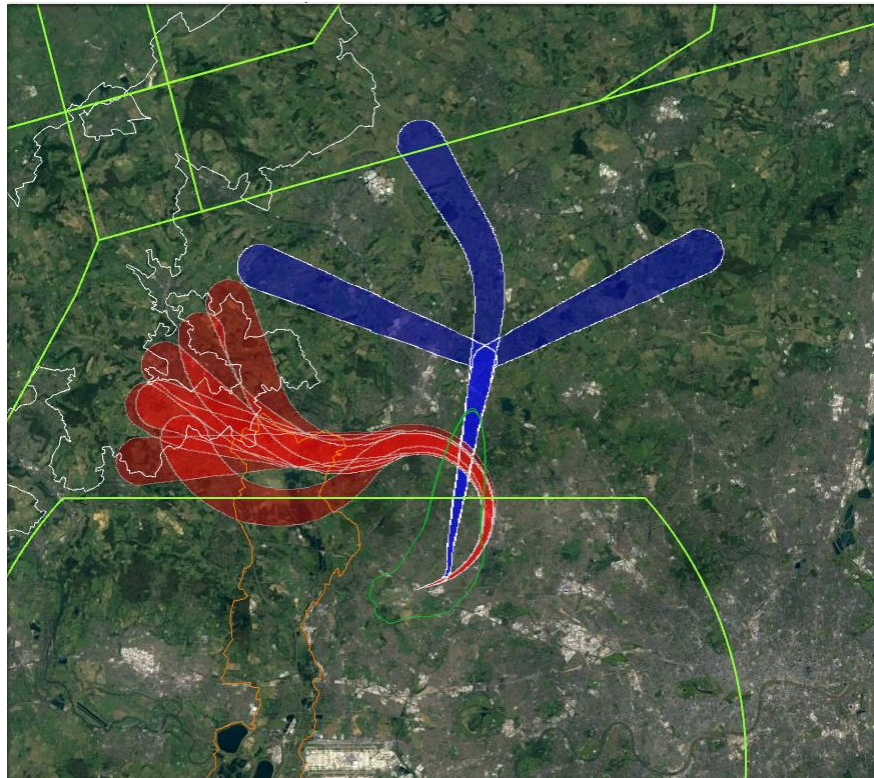
RWY07 DEPS Option 2 GRP2A



GROUP 2A	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track	51840	193373
Track	55034	193272
Track	44102	192941
Track	60447	193272
Track Average	52856	193215
Track Highest	60447	193373
Track Lowest	44102	192241



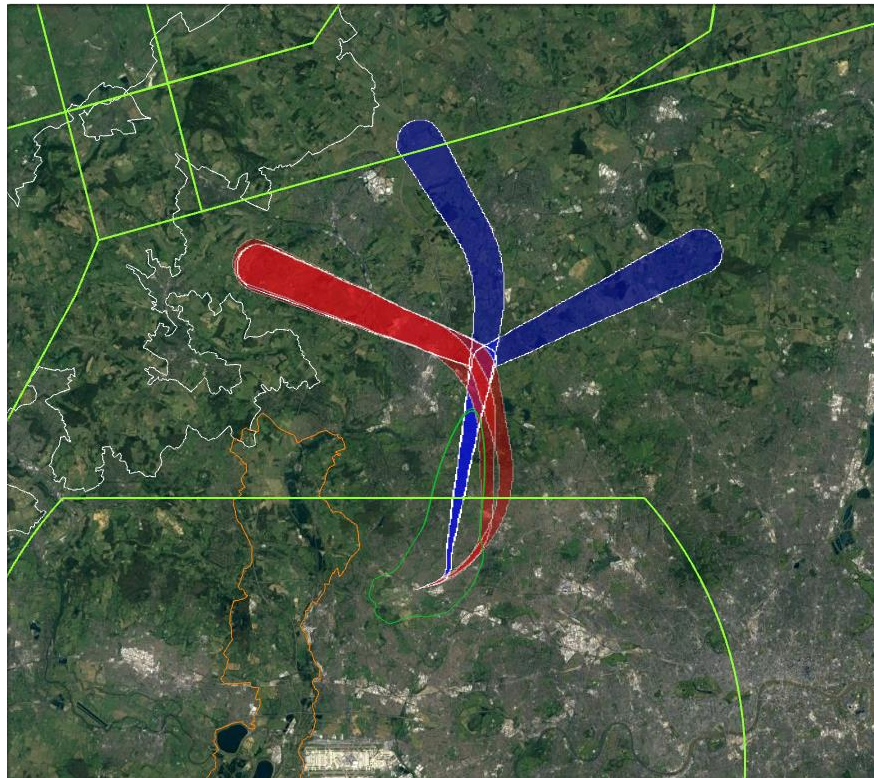
RWY07 DEPS Option 2 GRP2B



GROUP 2B	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track	65257	193178
Track	60164	192740
Track	61482	193005
Track	57992	192834
Track	46162	192726
Track	52287	193119
Track	61313	193119
Track Average	57808	192960
Track Highest	65257	193178
Track Lowest	46162	192726



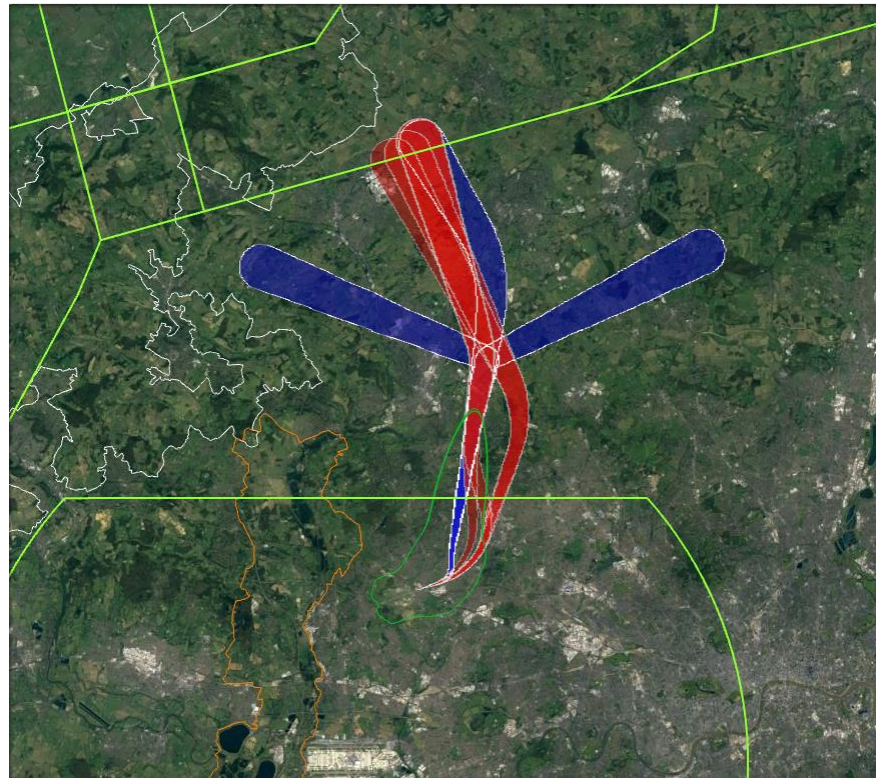
RWY07 DEPS Option 2 GRP2C



GROUP 2C	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track	83088	201012
Track	79788	193454
Track Average	81438	197233
Track Highest	83088	201012
Track Lowest	79788	193454



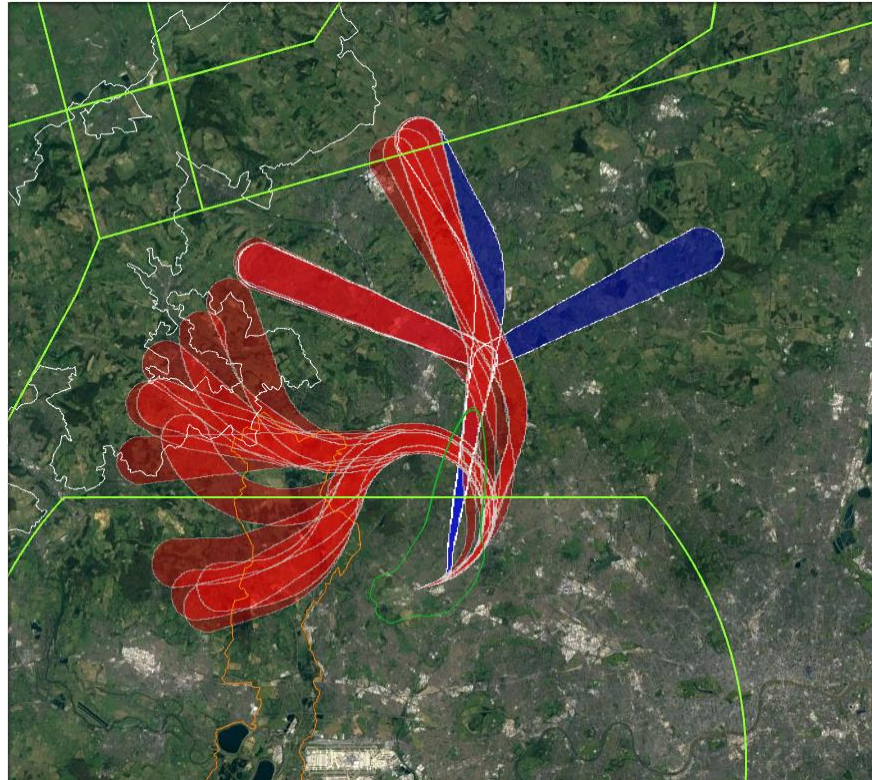
RWY07 DEPS Option 2 GRP2D



GROUP 2D	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track	45885	199132
Track	34368	171624
Track	43634	199897
Track	44887	186608
Track Average	42194	189315
Track Highest	45885	199897
Track Lowest	34368	171624



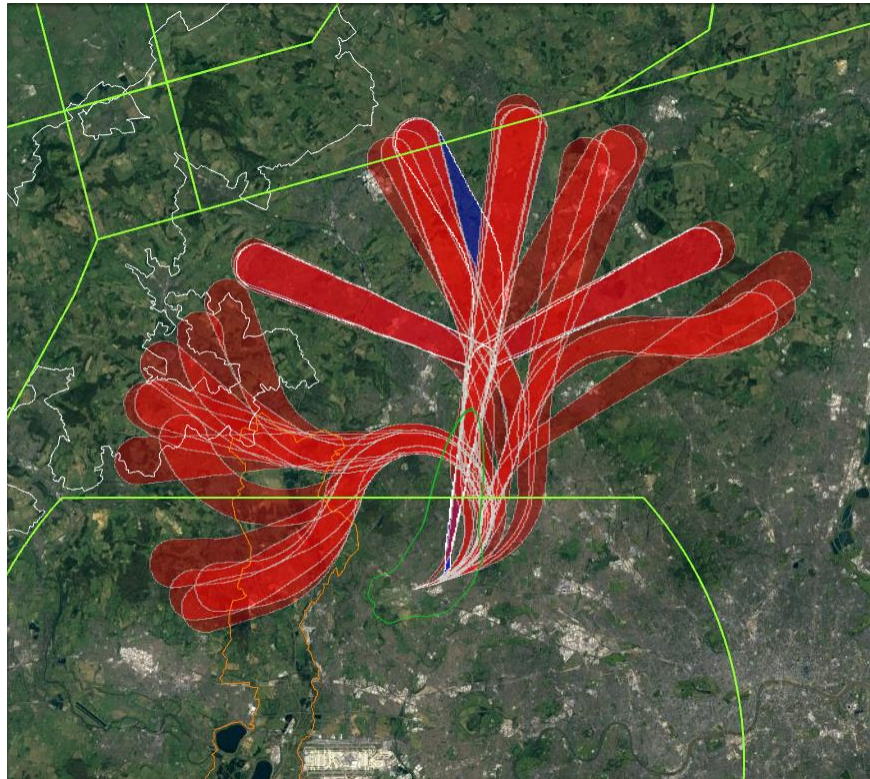
RWY07 DEPS Option 2



Option 2	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track Average	55749	192665
Track Highest	83088	201012
Track Lowest	34368	171624



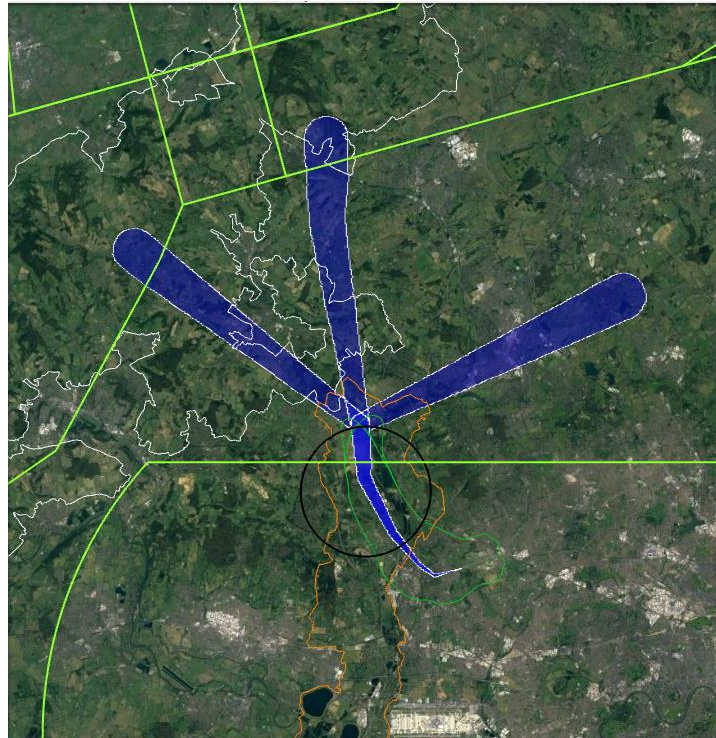
RWY07 DEPS ALL



RWY 07 DEPS ALL	Total Population	SEL_70
Baseline Average	48691	157118
Baseline Highest	65188	157633
Baseline Lowest	38646	156831
Track Average	61957	192698
Track Highest	97302	211471
Track Lowest	34368	158012



BASELINE RWY25 DEPS

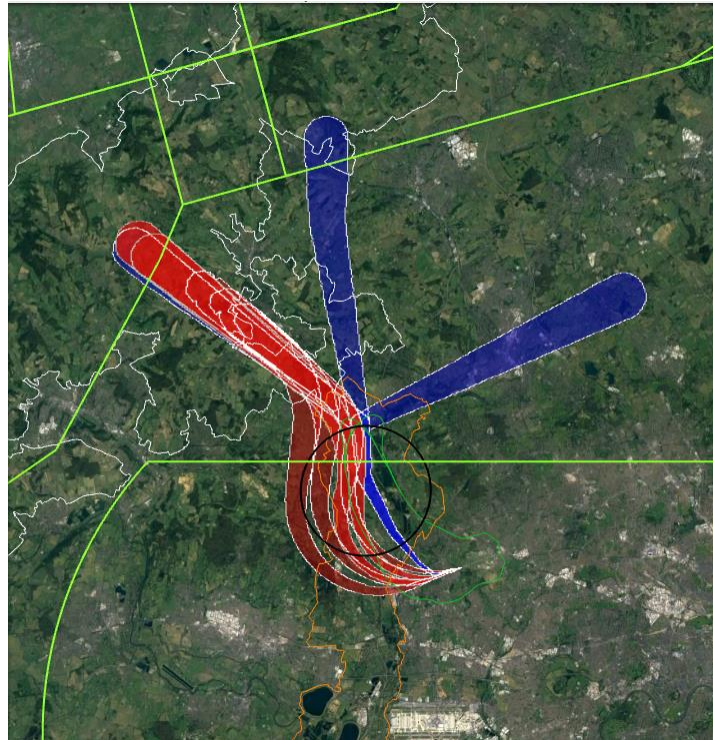


RWY 25 DEPS	Total Population	SEL_70
Baseline (Average)	41680	66500
NORTH WEST	17153	65856
NORTH	25764	65990
NORTH EAST	82122	67653

GROUP 1A	Height at Denham ATZ	
	7% Climb	10% Climb
ALL	1050	1500



RWY25 DEPS Option 1 GRP1A

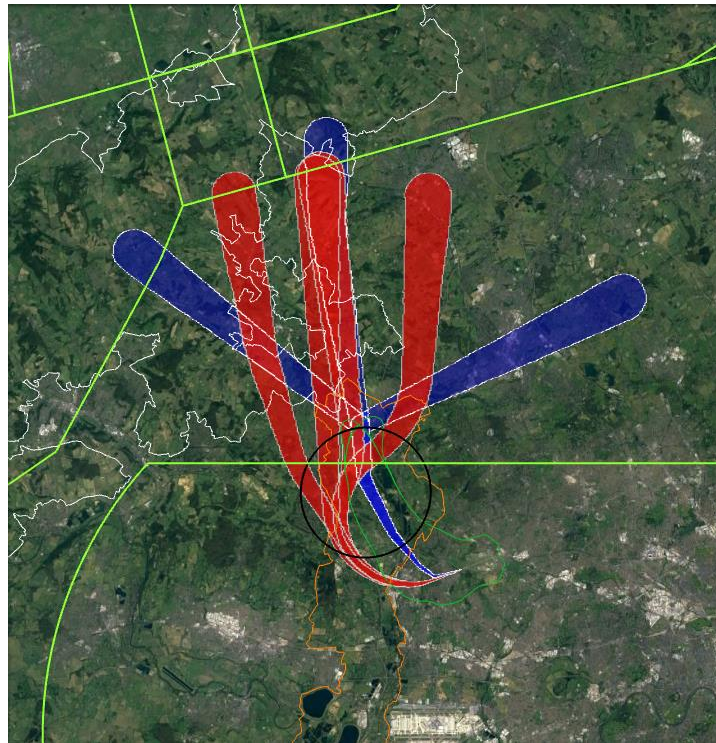


GROUP 1A	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track	16379	75920
Track	28800	79909
Track	17513	72974
Track	19984	69653
Track	33871	79995
Track Average	23309	75690
Track Highest	33871	79995
Track Lowest	16379	69653

GROUP 1A	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	1450	2050



RWY25 DEPS Option 1 GRP1B

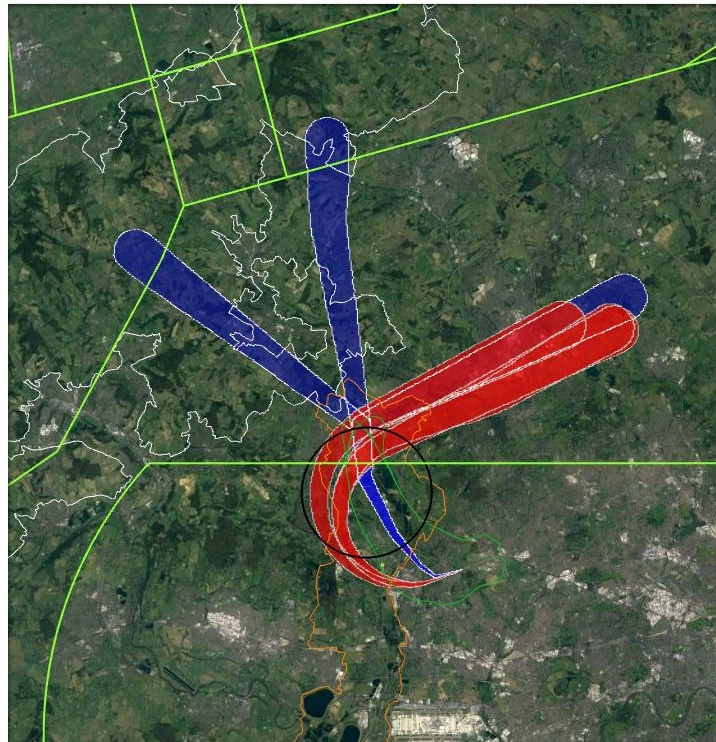


GROUP 1B	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track	45782	75886
Track	21704	75876
Track	50638	79811
Track	22147	77920
Track Average	35068	77373
Track Highest	50638	79811
Track Lowest	21704	75876

GROUP 1B	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	1650	2350



RWY25 DEPS Option 1 GRP1C

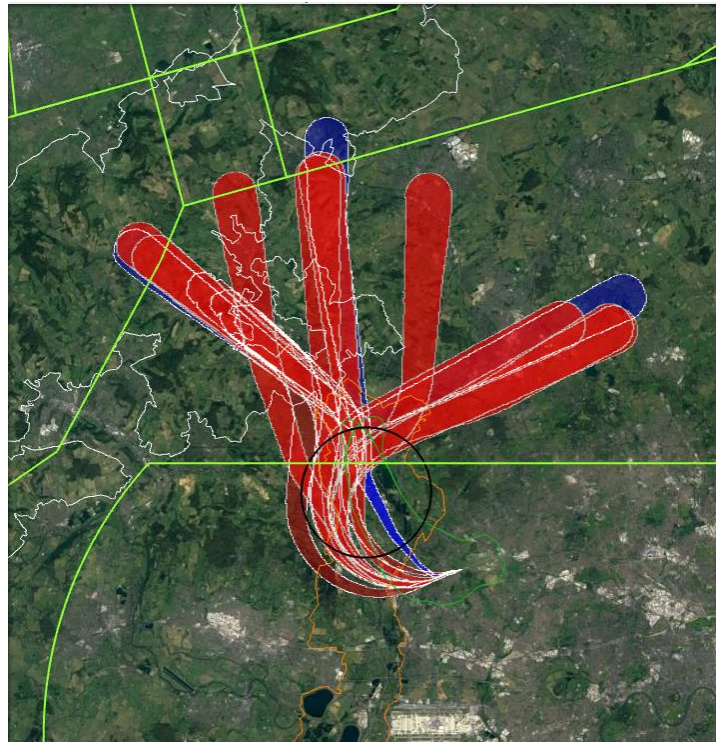


GROUP 1C	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track	49860	76050
Track	94736	80495
Track	47062	76070
Track Average	63886	77538
Track Highest	94736	80495
Track Lowest	47062	76050

GROUP 1C	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	1750	2500



RWY25 DEPS Option 1

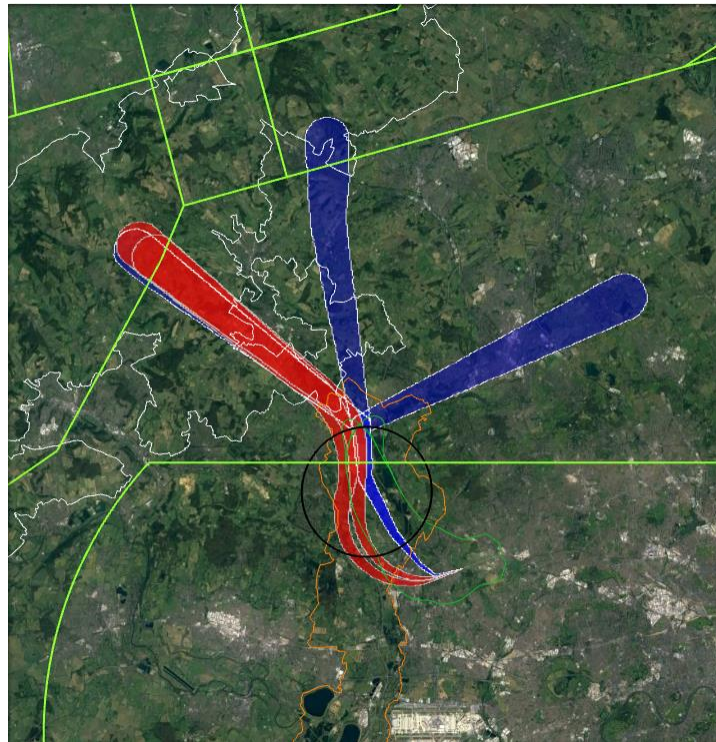


Option 1	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track Average	37373	76713
Track Highest	94736	80495
Track Lowest	16379	69653

Option 1	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	1600	2300



RWY25 DEPS Option 2 GRP2A

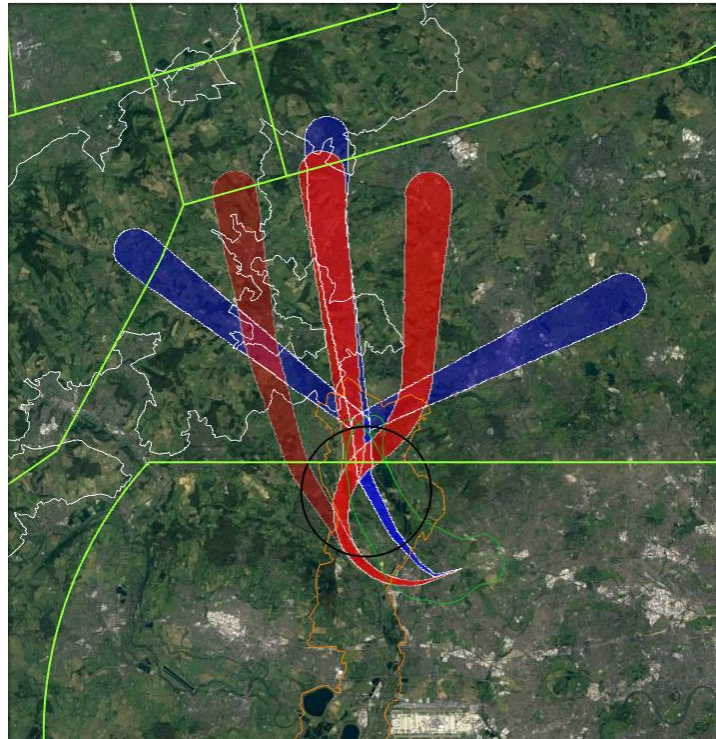


GROUP 2A	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track	16379	75920
Track	17513	72974
Track Average	16946	74447
Track Highest	17513	75920
Track Lowest	16379	72974

GROUP 2A	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	1450	2050



RWY25 DEPS Option 2 GRP2B

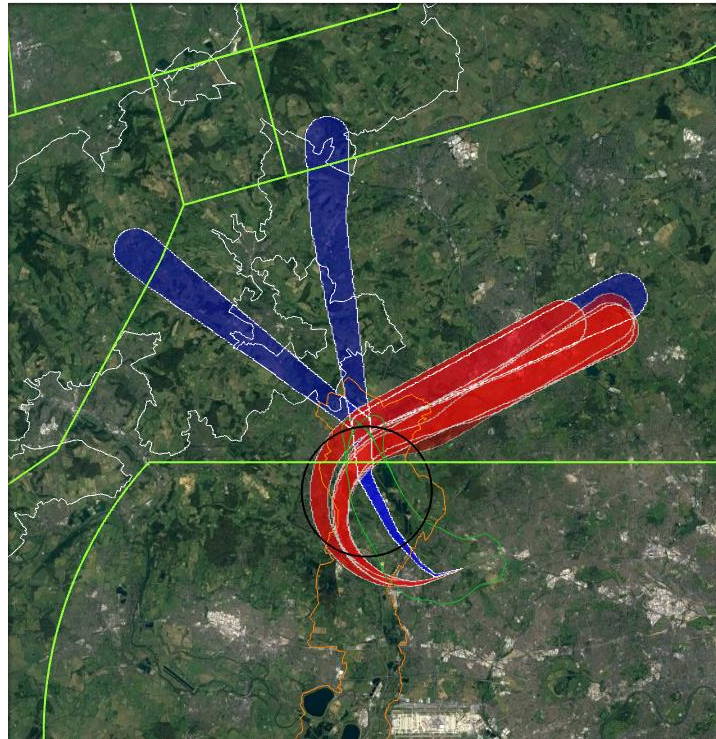


GROUP 2B	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track	45782	75886
Track	50638	79811
Track	21704	75876
Track Average	39375	77191
Track Highest	50638	79811
Track Lowest	21704	75876

GROUP 2B	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	1600	2300



RWY25 DEPS Option 2 GRP2C

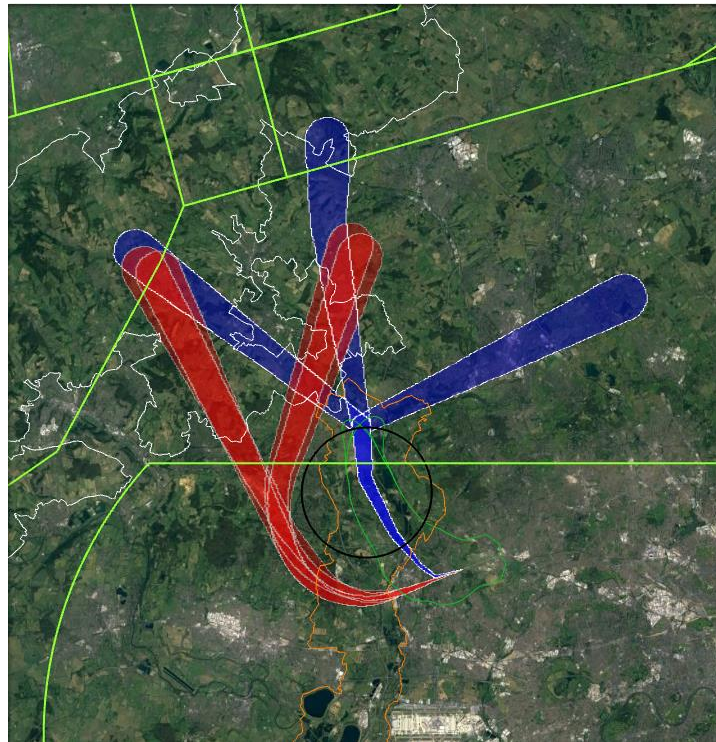


GROUP 2C	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track	49860	76050
Track	94736	80495
Track	47062	76070
Track Average	63886	77538
Track Highest	94736	80495
Track Lowest	47062	76050

GROUP 2C	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	1750	2500



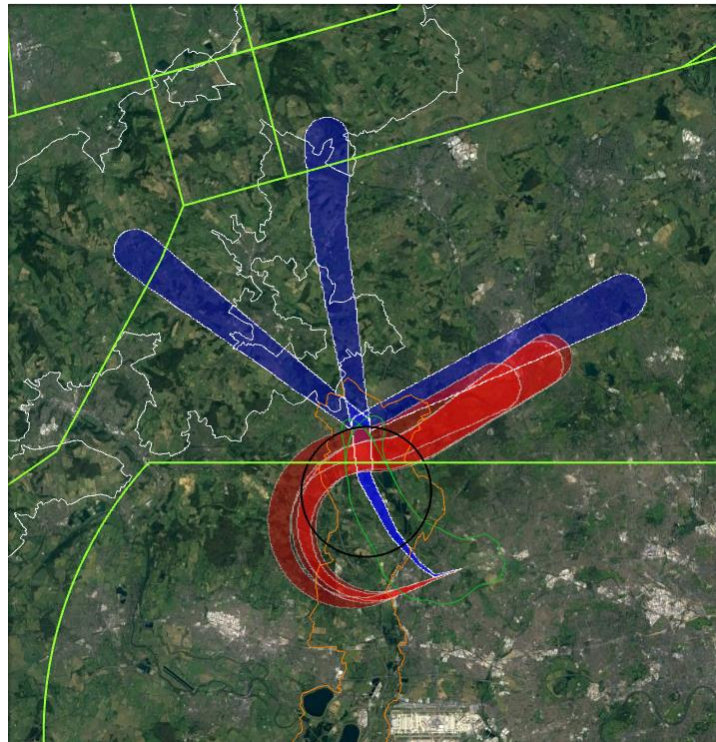
RWY25 DEPS Option 2 GRP2D



GROUP 2D	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track	22123	79284
Track	10382	80654
Track	12667	79776
Track	16598	80654
Track Average	15443	80092
Track Highest	22123	80654
Track Lowest	10382	79284



RWY25 DEPS Option 2 GRP2E

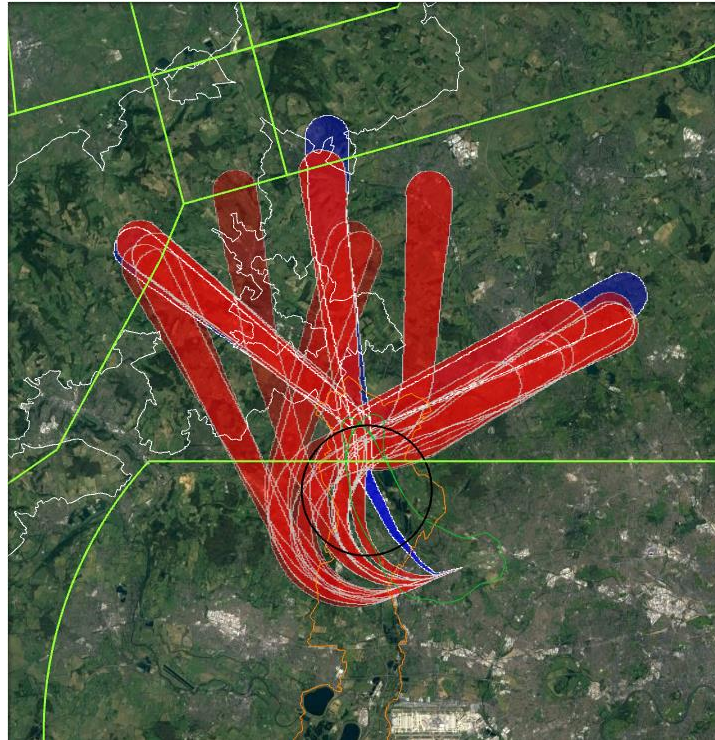


GROUP 2E	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track	67825	80369
Track	68935	81228
Track	47570	81341
Track Average	61443	80979
Track Highest	68935	81341
Track Lowest	47570	80369

GROUP 2E	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	3600	5150



RWY25 DEPS Option 2

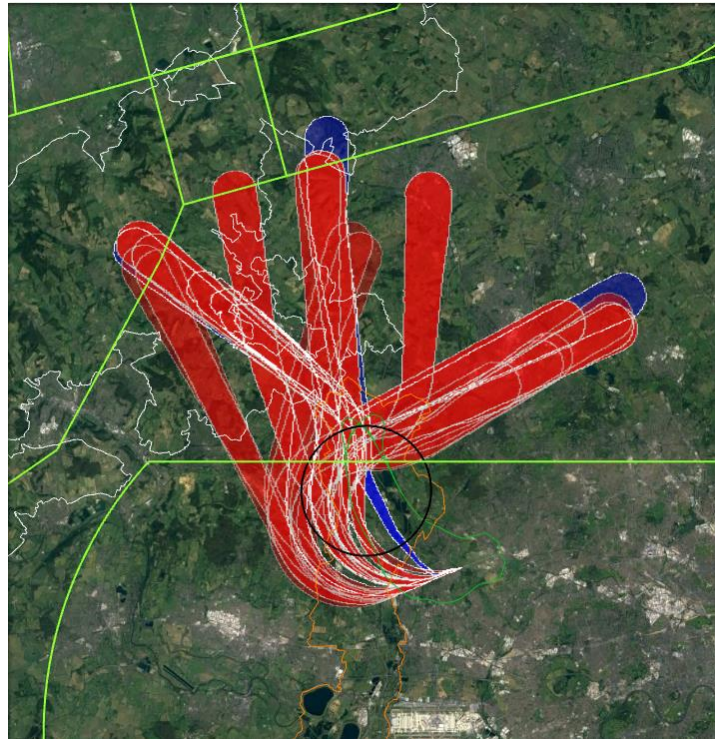


Option 2	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track Average	39318	78426
Track Highest	94736	81341
Track Lowest	10382	72794

Option 2	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	2150	3100



RWY25 DEPS ALL



RWY 25 DEPS ALL	Total Population	SEL_70
Baseline Average	41680	66500
Baseline Highest	82122	67653
Baseline Lowest	17153	65856
Track Average	38453	77665
Track Highest	94736	81341
Track Lowest	10382	69653

RWY 25 DEPS ALL	Height at Denham ATZ	
	7% Climb	10% Climb
Baseline	1050	1500
Average of those that penetrate	1800	2700



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